

AMENDMENT

In the Claims

Please cancel Claims 1 and 2.

Please add the following new Claims, 32-65.

Rule 1.126 Sub C1 26  
32. (New) A method of treating prostate cancer comprising administration of a composition comprising mycobacterial DNA (B-DNA) and a pharmaceutically acceptable carrier to an animal or human having prostate cancer in an amount effective to have an antineoplastic effect on prostate cancer in the animal or human having the prostate cancer.

27 26  
33. (New) The method of Claim 32, wherein the mycobacterial DNA is obtained from *M. smegmatis*, *M. kansasii*, *M. fortuitum*, *M. tuberculosis*, *M. bovis*, *M. vaccae*, *M. avium* or *M. phlei*.

28 26  
34. (New) The method of Claim 32, wherein the mycobacterial DNA (B-DNA) is obtained from *M. phlei*.

29 26  
35. (New) The method of Claim 32, wherein the pharmaceutically acceptable carrier is mycobacterial cell wall (BCC).

30 29  
36. (New) The method of Claim 35, wherein the mycobacterial DNA (B-DNA) is preserved and complexed on the mycobacterial cell wall (BCC).

31 26  
37. (New) The method of Claim 32, wherein the pharmaceutically acceptable carrier is *M. phlei* cell wall (MCC).

<sup>32</sup>  
~~38.~~ (New) The method of Claim <sup>3</sup>~~37~~, wherein *M. phlei* DNA is preserved and complexed on the *M. phlei* cell wall (MCC).

<sup>33</sup>  
~~39.~~ (New) The method of Claim <sup>26</sup>~~32~~, wherein the prostate cancer is hormone-sensitive prostate cancer.

<sup>34</sup>  
~~40.~~ (New) The method of Claim <sup>33</sup>~~39~~, wherein the hormone is an androgen.

<sup>35</sup>  
~~41.~~ (New) The method of Claim <sup>34</sup>~~40~~, wherein the androgen is testosterone.

<sup>36</sup>  
~~42.~~ (New) The method of Claim <sup>26</sup>~~32~~, wherein the antineoplastic effect is inhibition of proliferation of cancer cells in the prostate, induction of apoptosis in the cancer cells in the prostate, induction of cytokine synthesis in the cancer cells in the prostate, or induction of cytokine synthesis by immune system cells in the prostate.

<sup>37</sup>  
~~43.~~ (New) The method of Claim <sup>36</sup>~~42~~, wherein the cytokine is IL-12 or TNF- $\alpha$ .

<sup>38</sup>  
~~44.~~ (New) The method of Claim <sup>26</sup>~~32~~, wherein the pharmaceutically acceptable carrier is a solid carrier, a liquid carrier, or combination of a solid and liquid carrier.

<sup>39</sup>  
~~45.~~ (New) The method of Claim <sup>26</sup>~~32~~ further comprising administration of anti-androgenic agents, chemotherapeutic agents, steroids, or immunological agents.

<sup>40</sup>  
~~46.~~ (New) A method of treating prostate cancer comprising administration of a composition comprising mycobacterial DNA (B-DNA) preserved and complexed on mycobacterial cell wall (BCC) and a pharmaceutically acceptable carrier to an animal or human having prostate cancer in an amount effective to have an antineoplastic effect on prostate cancer in the animal or human having the prostate cancer.

<sup>41</sup>  
~~47.~~ (New) The method of Claim ~~46~~<sup>40</sup>, wherein the mycobacterial DNA is obtained from ~~*M. smegmatis*, *M. kansasii*, *M. fortuitum*, *M. tuberculosis*, *M. bovis*, *M. vaccae*, *M. avium* or *M. phlei*.~~

<sup>42</sup>  
~~48.~~ (New) The method of Claim ~~46~~<sup>40</sup>, wherein the mycobacterial DNA is obtained from *M. phlei*.

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1.126  
<sup>43</sup>  
~~49.~~ (New) The method of Claim ~~46~~<sup>40</sup>, wherein the mycobacterial cell wall is *M. phlei* cell wall (MCC).

<sup>44</sup>  
~~50.~~ (New) The method of Claim ~~46~~<sup>40</sup>, wherein the prostate cancer is hormone-sensitive prostate cancer.

<sup>45</sup>  
~~51.~~ (New) The method of Claim ~~50~~<sup>44</sup>, wherein the hormone is an androgen.

<sup>46</sup>  
~~52.~~ (New) The method of Claim ~~51~~<sup>45</sup>, wherein the androgen is testosterone.

<sup>47</sup>  
~~53.~~ (New) The method of Claim ~~46~~<sup>40</sup>, wherein the antineoplastic effect is inhibition of proliferation of cancer cells in the prostate, induction of apoptosis in cancer cells in the prostate, induction of cytokine synthesis by cancer cells in the prostate, or induction of cytokine synthesis by immune system cells in the prostate.

<sup>48</sup>  
~~54.~~ (New) The method of Claim ~~53~~<sup>47</sup>, wherein the cytokine is IL-12 or TNF- $\alpha$ .

<sup>49</sup>  
~~55.~~ (New) The method of Claim ~~46~~<sup>40</sup>, wherein the pharmaceutically acceptable carrier is a solid carrier, a liquid carrier, or a combination of a solid and liquid carrier.

<sup>50</sup>  
~~56.~~ (New) The method of Claim <sup>40</sup>~~46~~, further comprising administration of anti-androgenic agents, chemotherapeutic agents, steroids, or immunological agents.

<sup>51</sup>  
~~57.~~ (New) A method of treating prostate cancer comprising administration of a composition comprising mycobacterial cell wall (BCC) and a pharmaceutically acceptable carrier to an animal or human having prostate cancer in an amount effective to have an antineoplastic effect on prostate cancer in the animal or human having the prostate cancer.

<sup>52</sup>  
~~58.~~ (New) The method of Claim <sup>51</sup>~~57~~, wherein the mycobacterial cell wall (BCC) is *M. phlei* cell wall (MCC).

<sup>53</sup>  
~~59.~~ (New) The method of Claim <sup>51</sup>~~57~~, wherein the prostate cancer is hormone-sensitive prostate cancer.

<sup>54</sup>  
~~60.~~ (New) The method of Claim <sup>53</sup>~~59~~, wherein the hormone is an androgen.

<sup>55</sup>  
~~61.~~ (New) The method of Claim <sup>54</sup>~~60~~, wherein the androgen is testosterone.

<sup>56</sup>  
~~62.~~ (New) The method of Claim <sup>51</sup>~~57~~, wherein the antineoplastic effect is inhibition of proliferation of cancer cells in the prostate, induction of apoptosis in cancer cells in the prostate, induction of cytokine synthesis by cancer cells in the prostate, or induction of cytokine synthesis by immune system cells in the prostate.

<sup>57</sup>  
~~63.~~ (New) The method of Claim <sup>56</sup>~~62~~, wherein the cytokine is IL-12 or TNF- $\alpha$ .

<sup>58</sup>  
~~64.~~ (New) The method of Claim <sup>51</sup>~~57~~, wherein the pharmaceutically acceptable carrier is a solid carrier, a liquid carrier, or a combination of a solid and liquid carrier.

*Rule 1.126*  
<sup>59</sup>~~55~~. (New) The method of Claim ~~57~~<sup>51</sup>, further comprising administration of anti-androgenic agents, chemotherapeutic agents, steroids, or immunological agents.

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